1. Selezionare tutti gli studenti iscritti al Corso di Laurea in Economia

SELECT `students`.\*, `degrees`.\*

FROM `students`

JOIN `degrees` ON `students`.`degree\_id` = `degrees`.`id`

WHERE `degrees`.`name` = 'Corso di Laurea in Economia';

1. Selezionare tutti i Corsi di Laurea Magistrale del Dipartimento di Neuroscienze

SELECT `degrees`.\*, `departments`.\*

FROM `degrees`

JOIN `departments` ON `degrees`.`department\_id` = `departments`.`id`

WHERE `departments`.`name` = 'Dipartimento di Neuroscienze'

AND `degrees`.`level` = 'Magistrale';

1. Selezionare tutti i corsi in cui insegna Fulvio Amato (id=44)

SELECT `teachers`.`name`, `teachers`.`surname`, `teachers`.`id` ,`courses`.`name`

FROM `teachers`

JOIN `course\_teacher` ON `course\_teacher`.`teacher\_id` = `teachers`.`id`

JOIN `courses` ON `course\_teacher`.`course\_id` = `courses`.`id`

WHERE `teachers`.`name` = 'Fulvio' AND `teachers`.`surname` = 'Amato'

AND `teachers`.`id` = 44;

1. Selezionare tutti gli studenti con i dati relativi al corso di laurea a cui sono iscritti e il relativo dipartimento, in ordine alfabetico per cognome e nome

SELECT `students`.\* , `degrees`.`name` , `departments`.`name` AS `department`

FROM `students`

JOIN `degrees` ON `students`.`degree\_id` = `degrees`.`id`

JOIN `departments` ON `departments`.`id` = `degrees`.`department\_id`

ORDER BY `students`.`surname` , `students`.`name` ASC;

1. Selezionare tutti i corsi di laurea con i relativi corsi e insegnanti

SELECT `degrees`.`name` AS `degree`, `teachers`.\*, `courses`.`name` AS `course`

FROM `degrees`

JOIN `courses` ON `courses`.`degree\_id` = `degrees`.`id`

JOIN `course\_teacher` ON `course\_teacher`.`course\_id` = `courses`.`id`

JOIN `teachers` ON `course\_teacher`.`teacher\_id` = `teachers`.`id`;

1. Selezionare tutti i docenti che insegnano nel Dipartimento di Matematica (54)

SELECT DISTINCT `departments`.`name` AS `department`, `teachers`.`name`, `teachers`.`surname`

FROM `departments`

JOIN `degrees` ON `degrees`.`department\_id` = `departments`.`id`

JOIN `courses` ON `courses`.`degree\_id` = `degrees`.`id`

JOIN `course\_teacher` ON `course\_teacher`.`course\_id` = `courses`.`id`

JOIN `teachers` ON `course\_teacher`.`teacher\_id` = `teachers`.`id`

WHERE `departments`.`name` = 'Dipartimento di Matematica';

1. BONUS: Selezionare per ogni studente il numero di tentativi sostenuti

per ogni esame, stampando anche il voto massimo. Successivamente,

filtrare i tentativi con voto minimo 18.

SELECT `students`.`name`, `students`.`surname`, `courses`.`name` AS `course`, COUNT(`exam\_student`.`exam\_id`) AS `attempts`,

MAX(`exam\_student`.`vote`) AS `max\_vote`

FROM `students`

JOIN `exam\_student` ON `exam\_student`.`student\_id` = `students`.`id`

JOIN `exams` ON `exam\_student`.`exam\_id` = `exams`.`id`

JOIN `courses` ON `exams`.`course\_id` = `courses`.`id`

GROUP BY `students`.`id`, `courses`.`id`

HAVING MIN(`exam\_student`.`vote`) >= 18;